

**REMARKS**

Claims 1-3 and 8 are pending in the application and are under active consideration.

Claim 1 has been amended to make explicit that the second antigen is a cancer antigen selected from the group consisting of c-erbB-2, HMW mucin, and HMW mucin II. Support for the amendment can be found in the original claim and in the specification, for example, at page 5, line 27 through page 28, line 11. Accordingly, the specification provides adequate support for this amendment. Entry of the amendment is respectfully requested.

In order to expedite prosecution, claim 8 has been rewritten in independent form. Applicant is amending the claim solely to obtain expeditious allowance of the instant application and not for reasons related to patentability. The Examiner has indicated that claim 8 would be allowable if rewritten as an independent claim.

Amendment of the claims is made without prejudice, without intent to abandon any originally claimed subject matter, and without intent to acquiesce in any rejection of record. Applicants expressly reserve the right to file one or more continuing applications hereof containing the canceled or unamended claims.

Applicants note with appreciation the withdrawal of the previous rejections under 35 U.S.C. § 102(b), 35 U.S.C. § 112, first paragraph, and 35 U.S.C. § 112, second paragraph.

**Rejection under 35 U.S.C. § 102**

Claims 1-3 have been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by the reference of Ring et al. (U.S. Patent No. 5,959,084) as evidenced by Clark et al. (1997) *Cancer Immunol. Immunother.* 44:265-272 and by Weiner et al. (1995) *Cancer Research* 55:4586-4593. In particular, the Office Action alleges:

Ring teaches bispecific antibodies that bind to Fc<sub>Y</sub>RIII and to p-glycoprotein, and methods of administering bispecific antibodies to patients (col. 24, line 63 – col. 25, line 24). Because the instant specification fails to teach that the amounts of bispecific antibodies that would be sufficient to produce antibodies in a patient are different from the amounts that would be sufficient to kill cancer cells when injected in a patient, it is assumed that because the steps of the claimed methods

are the same as those of Ring's methods (administration of a bispecific antibody within the scope of bispecific antibodies recited in the claims), that the methods of Ring inherently result in the production of antibodies. Thus, Ring teaches methods that are the same as that claimed because Ring teaches a method comprising the same active steps of the claimed methods (i.e. same antibody, same step of administering to a patient). (Office Action, page 4.)

In addition, the Office Action alleges that "Weiner teaches a method of using a bispecific antibody for the purpose of treating cancer where the intended effect is to produce a cellular response against the tumor" and "[t]he dosages used in Weiner are 1.0 mg/m<sup>2</sup>, 2.5 mg/m<sup>2</sup> and 5.0 mg/m<sup>2</sup>." (Office Action, page 4.)

The Office Action further alleges that "Clarke teaches a method of using a bispecific antibody for the purpose of treating cancer, where the production of an antibody response is observed, and the antibody response produces antibodies to the second antigen (in this case anti-c-erbB2 antigen, see page 266, 1<sup>st</sup> column, 2<sup>nd</sup> full paragraph)" and "[t]he dosages used in Clarke are 1.0 mg/m<sup>2</sup>, 2.5 mg/m<sup>2</sup> and 5.0 mg/m<sup>2</sup> (see "Materials and Methods", page 266)." (Office Action, page 4.)

Applicant respectfully traverses the rejection under 35 U.S.C. § 102(e) on the following grounds.

For a reference to anticipate claimed subject matter under 35 U.S.C. § 102, "the reference must teach every aspect of the claimed invention either explicitly or implicitly." M.P.E.P. § 706.02. Applicants respectfully submit that the reference of Ring et al. as evidenced by Clark et al. and Weiner et al. does not teach all aspects of the Applicants invention, either explicitly or implicitly.

The reference of Ring et al. (U.S. Patent No. 5,959,084) does not disclose a method of inducing production of antibodies against a cancer antigen, comprising the step of administering a bispecific antibody comprising a binding site capable of recognizing and binding a cancer antigen selected from the group consisting of c-erbB-2, HMW mucin, and HMW mucin II. Nor does the reference of Ring et al. disclose a bispecific antibody that is derived from a monoclonal antibody produced by any of the following hybridomas: 452F2 (HB 10811), 741F8 (HB 10807), 759E3 (HB 10808), 454C11 (HB 8484), 788G6 (HB 8692), 200F9 (HB 10791), 697B3 (HB 10806), 120H7

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(HB 10790), 203E2 (HB 10799), 254H9 (HB 10792), 245E7 (HB 8489), 2G3 (HB 8491), and 369F10 (HB 8682). Therefore, claim 1 and all claims dependent therefrom are not anticipated by Ring et al.

For at least these reasons, withdrawal of the rejection under 35 U.S.C. § 102(e) is respectfully requested.

CONCLUSION

In light of the above remarks, Applicant submits that the present application is fully in condition for allowance. Early notice to that effect is earnestly solicited.

If the Examiner contemplates other action, or if a telephone conference would expedite allowance of the claims, Applicant invites the Examiner to contact the undersigned.

The Commissioner is hereby authorized to charge any fees and credit any overpayment of fees which may be required under 37 C.F.R. §1.16, §1.17, or §1.21, to Deposit Account No. 18-1648.

Please direct all further written communications regarding this application to:

Lisa Alexander, Esq.  
CHIRON CORPORATION  
Intellectual Property - R440  
P.O. Box 8097  
Emeryville, CA 94662-8097  
Telephone: (510) 923-2585  
Facsimile: (510) 655-3542

Respectfully submitted,

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By: Jenny Buckbinder  
Jenny Buckbinder, Ph.D.  
Registration No. 48,588  
(650) 354-3383

CHIRON CORPORATION  
Intellectual Property - R440  
P. O. Box 8097  
Emeryville, CA 94662-8097